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Substitute for form 1449A/PTO		<b>Complete If Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	TBD
		Filing Date	07/31/03
		First Named Inventor	Steven MOORE et al.
		Art Unit	TBD
		Examiner Name	TBD
Sheet 1 of 4	Attorney Docket Number	30287-95	

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
K		US- 3,678,204	07/18/1972	HARMUTH	
		US- 3,728,632	04/17/1973	ROSS	
		US- 4,447,747	05/08/1984	LAPOTIN	
		US- 4,641,317	02/03/1987	FULLERTON	
		US- 4,782,324	11/01/1988	UNDERWOOD	
		US- 4,979,186	12/18/1990	FULLERTON	
		US- 5,115,409	05/19/1992	STEPP	
		US- 5,146,616	09/08/1992	TANG ET AL.	
		US- 5,157,559	10/20/1992	GLEASON ET AL.	
		US- 5,362,108	11/08/1994	FULLERTON	
		US- 5,515,014	05/07/1996	TROUTMAN	
		US- 5,574,755	11/12/1996	PERSICO	
		US- 5,587,687	12/24/1996	ADAMS	
		US- 5,635,863	06/03/1997	PRICE, JR.	
		US- 5,677,927	10/14/1997	FULLERTON ET AL.	
		US- 5,687,169	11/11/1997	FULLERTON	
		US- 5,687,200	11/11/1997	BERGER	
		US- 5,708,377	01/13/1998	BRADLEY	
		US- 5,714,954	02/03/1998	CHUNG ET AL.	
		US- 5,768,700	06/16/1998	KARDONTCHIK	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
K		WO 01/93434 A2	12/06/2001	Martin ROFHEART et al.		

Examiner Signature	<i>/Kc lhu</i>	Date Considered	<i>1/20/06</i>
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<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Sheet	3	of	4

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		Number - Kind Code <sup>2</sup> (if known)			
		US- 2003/0048212A1	03/13/2003	Libova et al.	
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		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				

Examiner Signature	<i>Her</i>	Date Considered	1/20/06
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Substitute for form 1449B/PTO			<b>Complete if Known</b>		
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			Filing Date	07/31/03	
			First Named Inventor	Steven MOORE et al.	
			Group Art Unit	TBD	
			Examiner Name	TBD	
Sheet	Sheet No. 4	of	4	Attorney Docket Number	30287-95

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
K		FERNANDO RAMIREZ-MIRELES, "On Performance of Ultra Wideband Signals in Gaussian Noise and Dense Multipath," Paper 89C265, Accepted for Publication in the IEEE Transactions on Vehicular Technology, Pages 1-9.	
		FERNANDO RAMIREZ-MIRELES et al., "N-Orthogonal Time-Shift-Modulated Codes for Impulse Radio," Communication Sciences Institute, Department of Electrical Engineering-Systems, University of Southern California, Los Angeles, CA 90089-2565 USA, Pages 1-4.	
		HENNING F. HARMUTH, "Fundamental Limits for Radio Signals With Large Bandwidth," IEEE Transactions on Electromagnetic Compatibility, Vol. EMC-23, No. 1, February 1981, Pages 37-43.	
		HENNING F. HARMUTH, "Frequency-Sharing and Spread-Spectrum Transmission with Large Relative Bandwidth," IEEE Transactions on Electromagnetic Compatibility, Vol. EMC-20, No. 1, February 1978, Pages 232-239.	
		HENNING F. HARMUTH, "Applications of Walsh functions in communications," IEEE Spectrum, November 1969, Pages 82-91.	
		AETHER WIRE & LOCATION, INC., ROBERT FLEMING et al., "Integrated, Low-Power, Ultra-Wideband Transceivers for Distributed Position Location and Communication," Technical Abstracts of Proposal to Defense Advanced Research Projects Agency (DARPA), Part I - Technical Proposal, 1998, Pages 1-52.	
K		AETHER WIRE & LOCATION, INC., ROBERT FLEMING et al., "Low-Power, Miniature, Distributed Position Location and Communication Devices Using Ultra-Wideband, Nonsinusoidal Communication Technology," Semi-Annual Technical Report Prepared for: ARPA/FBI, July 1995, Pages 1-40.	

Examiner Signature	<i>[Signature]</i>	Date Considered	<i>1/20/06</i>
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